

CLAIMS

What we claim is:

- 5 1. In a telephony network, a method of generating
a customer invoice for usage of network services and
third-party services supportable by the network,
comprising:

 acquiring network charge information
10 representative of charges incurred by the customer for
usage of the network services;

 acquiring third-party charge information
representative of charges incurred by the customer for
usage of the third-party services;

15 identifying the third-party charge information
so as to distinguish the third party charge information
from the network charge information; and

 integrating, within a single invoice, network
and third-party charges reflective of the network and
20 third-party charge information, respectively.

2. The method of claim 1, wherein:

 the network charge information is
representative of charges incurred by the customer for
25 usage of the network services and for equipment usage;
and

 the third-party charge information is
representative of charges incurred by the customer for
usage of the third-party services and for equipment
30 usage.

3. The method of claim 1, wherein acquiring the third-party charge information comprises validating the third-party charge information.

4. The method of claim 1, wherein identifying the third-party charge information comprises identifying a code indicating a particular third-party service provider as a source of the third-party charge information.

5. The method of claim 1, wherein:
the third-party charge information comprises usage charge information representative of charges incurred by the customer for usage of the third-party services and equipment charge information representative of charges incurred by the customer for use of third-party equipment; and

identifying the third-party charge information comprises identifying a particular source code indicating a third-party service provider as a source of the usage charge information associated with the customer and identifying an equipment code indicating the particular third-party service provider as a source of the equipment.

6. The method of claim 1, wherein acquiring the third party charge information comprises:

receiving, by a third-party service provider, an order record transmitted from the telephony network;

inserting, by the third-party service provider, service parameters, equipment parameters, and a customer code into the order record; and

transmitting the order record from the third-party service provider to the telephony network.

7. The method of claim 1, wherein integrating the
5 network and third-party charges comprises locating, in
the single invoice, the network charges at a location of
the invoice presenting network related billing
information and the third-party charges at a location of
the invoice presenting non-network related billing
10 information.

8. The method of claim 1, wherein:
the charge information representative of
charges incurred by the customer for usage of the
15 network services comprises charges for usage of voice
and data services; and
the charge information representative of
charges incurred by the customer for usage of the third-
party services comprises charges for usage of paging
20 services.

9. The method of claim 1, wherein the charge
information representative of charges incurred by the
customer for usage of the third-party services comprises
25 charges for usage of paging services associated with
each of one or more paging units identified by a
corresponding unique identification number.

10. The method of claim 1, further comprising
30 computing a discount for at least one of usage of the
third-part services or equipment usage, wherein

information concerning the discount is integrated within the single invoice.

11. A billing system for use in a telephony
5 network, comprising:

a first subsystem that acquires usage charge information representative of charges incurred by the customer for usage of the network services and for usage of third-party services supportable by the network;

10 a second subsystem that acquires charge information representative of charges incurred by the customer for usage of network equipment and third-party equipment;

an extraction subsystem that extracts the
15 charge information from the first and second subsystems and sorts the charge information associated with each customer; and

an invoice processing subsystem that receives the sorted charge information from the extraction
20 subsystem and integrates, within a single invoice, network and third-party usage and equipment charges associated with each customer, such that the network usage and equipment charges are grouped at a first common location on the invoice and the third-party usage
25 and equipment charges are grouped at a second common location on the invoice.

12. The system of claim 11, wherein the first
subsystem validates the third-party charge information.

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13. The system of claim 11, wherein the invoice processing subsystem identifies a code embedded in the

third-party charge information indicating a particular third-party service provider as a source of the third-party charge information.

5 14. The system of claim 11, wherein the first subsystem detects a source code indicating a particular third-party service provider as a source of the usage charge information associated with a particular customer, and the second subsystem detects an equipment
10 code indicating the particular third party as a source of the third-party equipment.

15 15. The system of claim 11, wherein the second subsystem transmits an order record to a third-party service provider, and subsequently receives the order record, which includes service parameters, equipment parameters, and a customer code, from the third-party service provider.

20 16. The system of claim 11, wherein the invoice processing subsystem computes a discount associated with at least one of the third-party usage or equipment charges associated with each customer, and integrates information associated with the discount proximate to
25 the third-party usage and equipment charges grouped at the second common location on the invoice.

17. A system for producing a customer invoice for usage of network services and third-party services supportable by a network, comprising:

means for acquiring network charge information
5 representative of charges incurred by the customer for usage of the network services;

means for acquiring third-party charge information representative of charges incurred by the customer for usage of the third-party services;

10 means for identifying the third-party charge information so as to distinguish the third party charge information from the network charge information; and

means for integrating, within a single invoice, network and third-party charges reflective of
15 the network and third-party charge information, respectively.

18. The system of claim 17, wherein:

the third-party charge information comprises
20 usage charge information representative of charges incurred by the customer for usage of the third-party services and equipment charge information representative of charges incurred by the customer for use of third-party equipment; and

25 means for identifying the third-party charge information comprises means for identifying a particular source code indicating a third-party service provider as a source of the usage charge information associated with the customer and identifying an equipment code
30 indicating the particular third-party service provider as a source of the equipment.

19. The system of claim 17, wherein means for acquiring the third party charge information comprises:

means for receiving, by a third-party service provider, an order record transmitted from the telephony
5 network;

means for inserting, by the third-party service provider, service parameters, equipment parameters, and a customer code into the order record;
and

10 means for transmitting the order record from the third-party service provider to the telephony network.

20. The system of claim 17, wherein means for
15 integrating the network and third-party charges comprises means for locating, in the single invoice, the network charges at a location of the invoice presenting network related billing information and the third-party charges at a location of the invoice presenting non-
20 network related billing information.